



STATE OF MARYLAND

# DHMH

**Maryland Department of Health and Mental Hygiene**  
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Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

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**November 18, 2011**

## Public Health & Emergency Preparedness Bulletin: # 2011:45 Reporting for the week ending 11/12/11 (MMWR Week #45)

### CURRENT HOMELAND SECURITY THREAT LEVELS

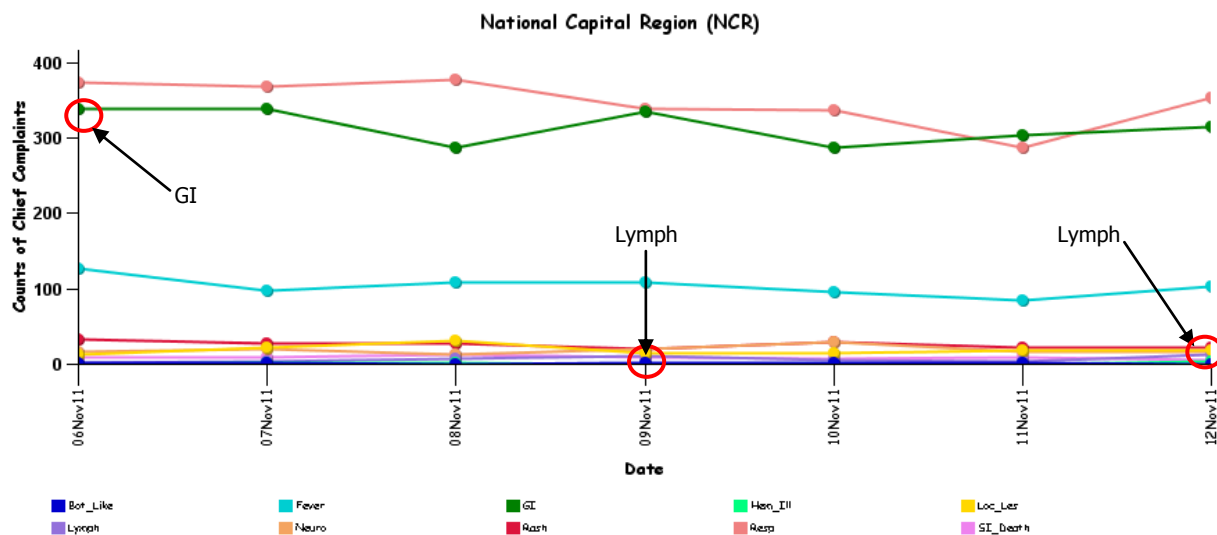
**National:** No Active Alerts  
**Maryland:** Level One (MEMA status)

### SYNDROMIC SURVEILLANCE REPORTS

#### **ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):**

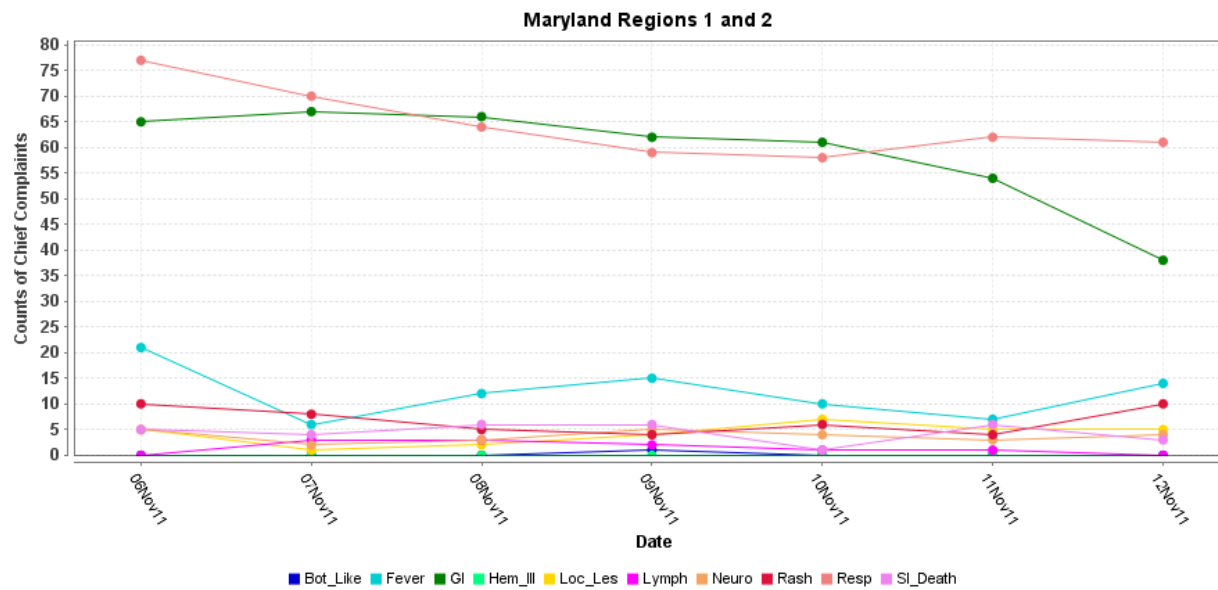
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

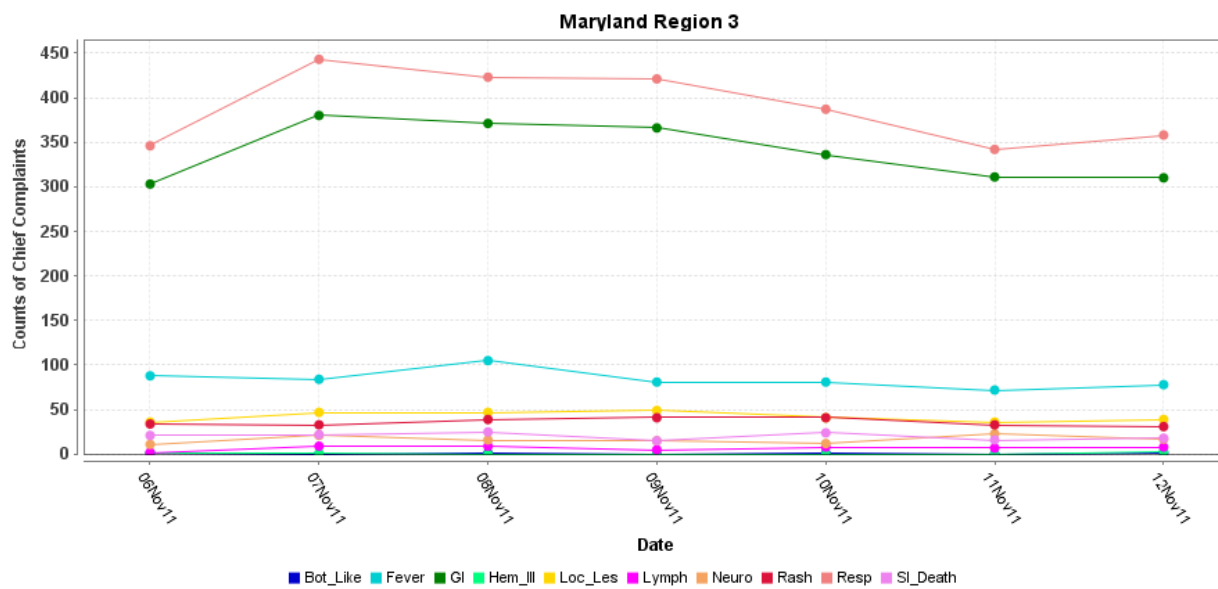


\*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

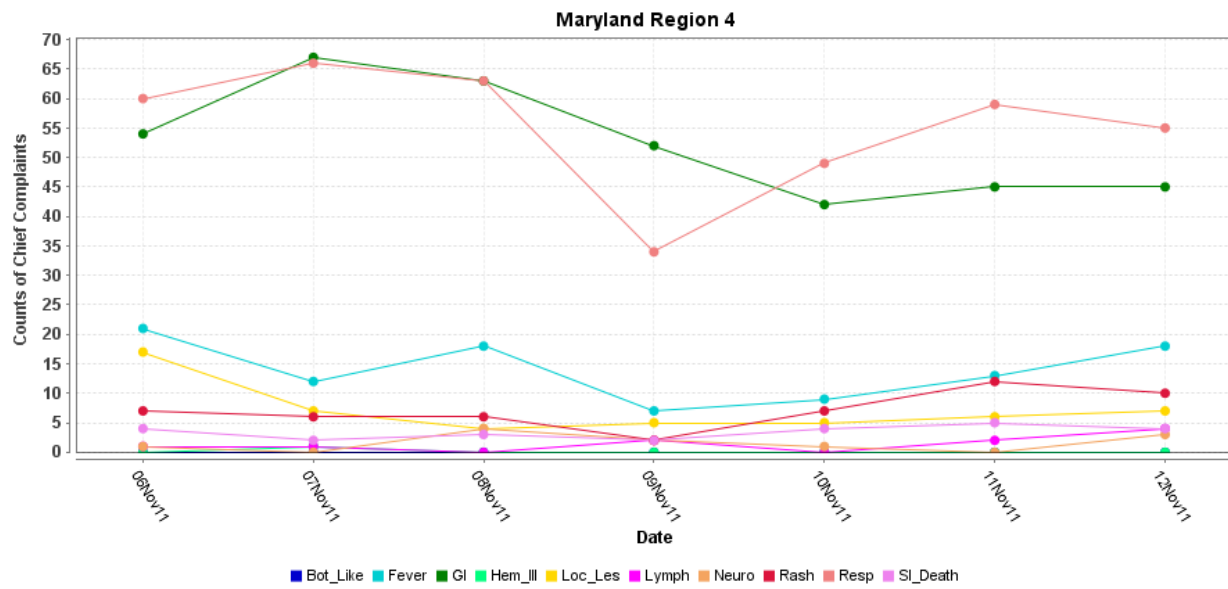
## MARYLAND ESSENCE:



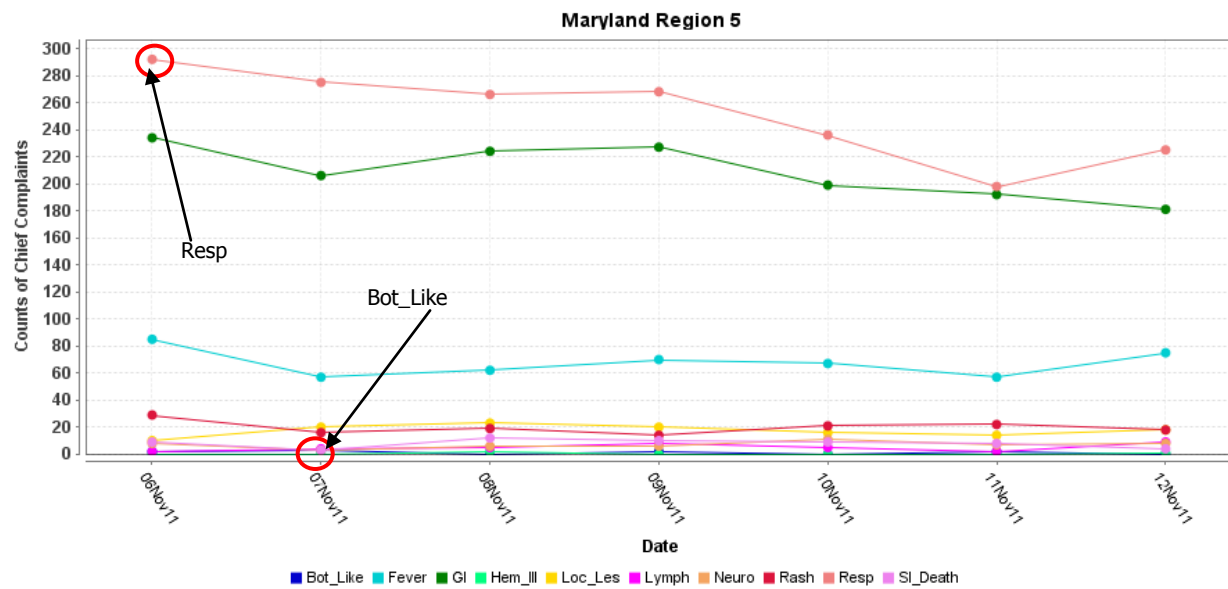
\* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



\* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



\* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE

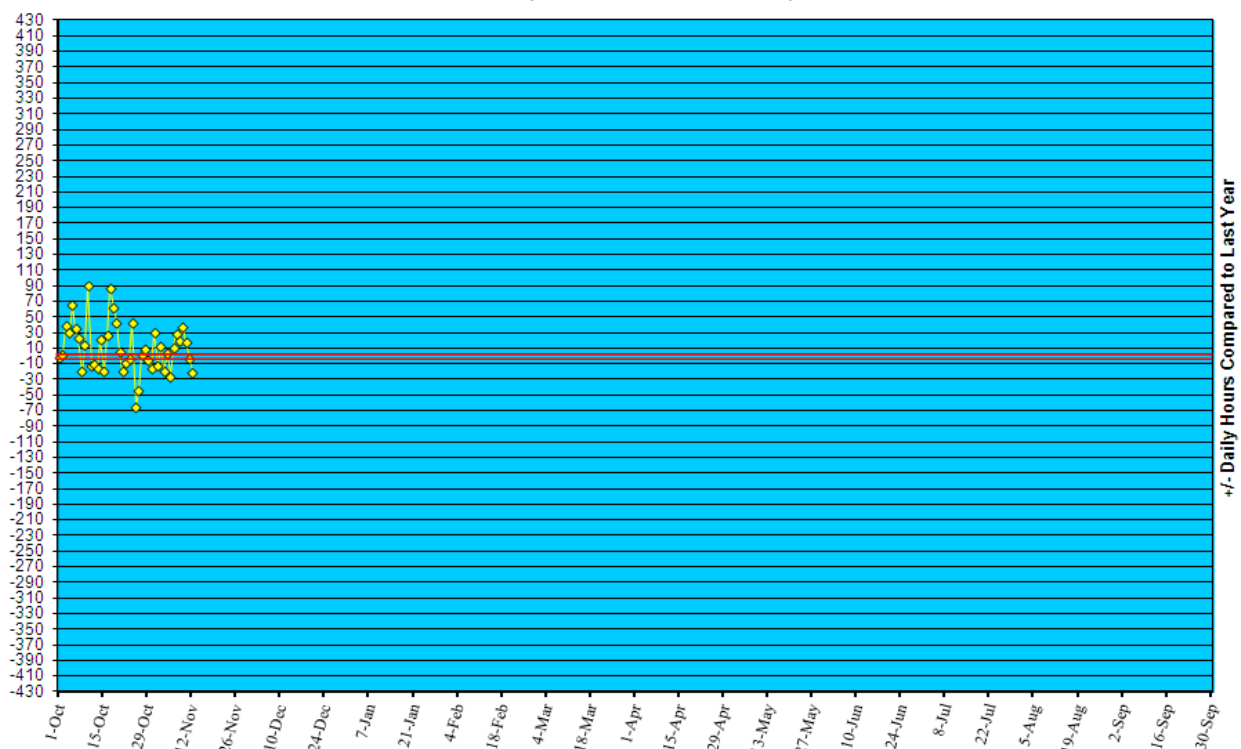


\* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

## **REVIEW OF EMERGENCY DEPARTMENT UTILIZATION**

**YELLOW ALERT TIMES (ED DIVERSION):** The reporting period begins 10/01/11.

### **Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '11 to November 12, '11**



## **REVIEW OF MORTALITY REPORTS**

**Office of the Chief Medical Examiner:** OCME reports no suspicious deaths related to an emerging public health threat for the week.

## **MARYLAND TOXIDROMIC SURVEILLANCE**

**Poison Control Surveillance Monthly Update:** Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in October 2011 did not identify any cases of possible public health threats.

## **REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS**

### **COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):**

<b>Meningitis:</b>	<b><u>Aseptic</u></b>	<b><u>Meningococcal</u></b>
New cases (November 06 – November 12, 2011):	4	0
Prior week (October 30 – November 05, 2011):	17	0
Week#45, 2010 (November 07 – November 13, 2010):	12	0

**0 outbreaks were reported to DHMH during MMWR Week 45 (November 06 – November 12, 2011).**

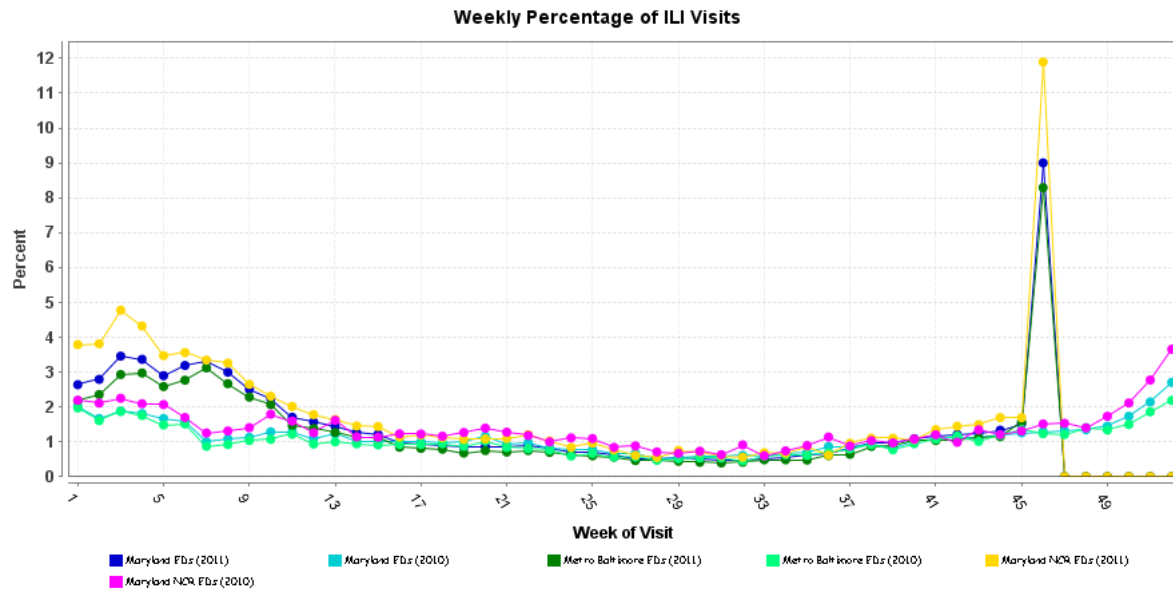
## MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 45 was: No activity, Minimal Intensity.

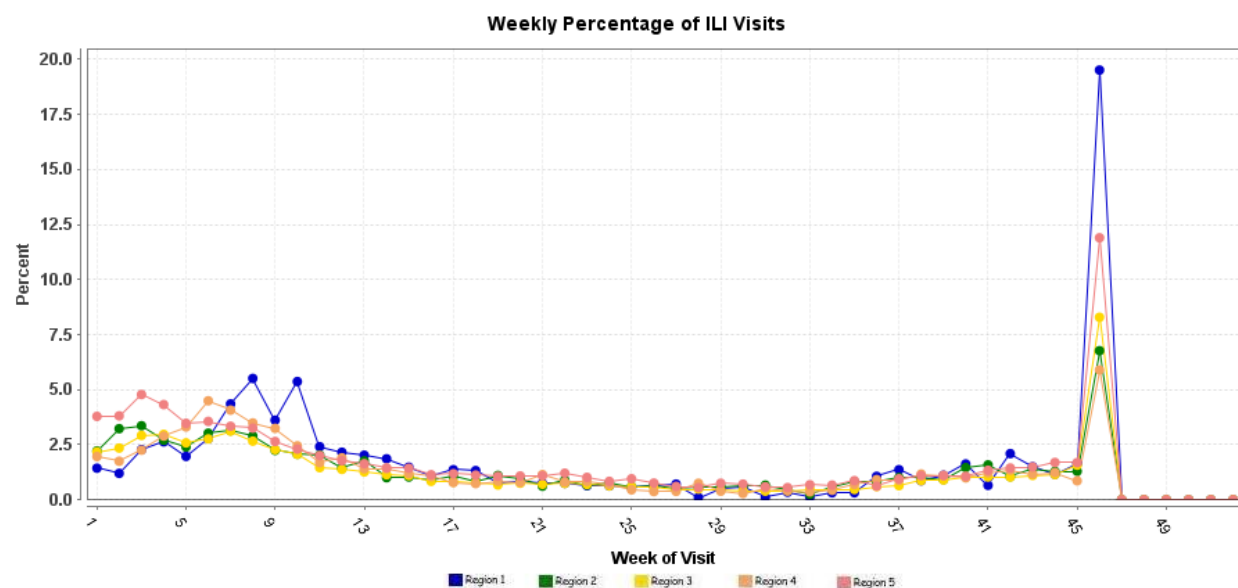
## SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



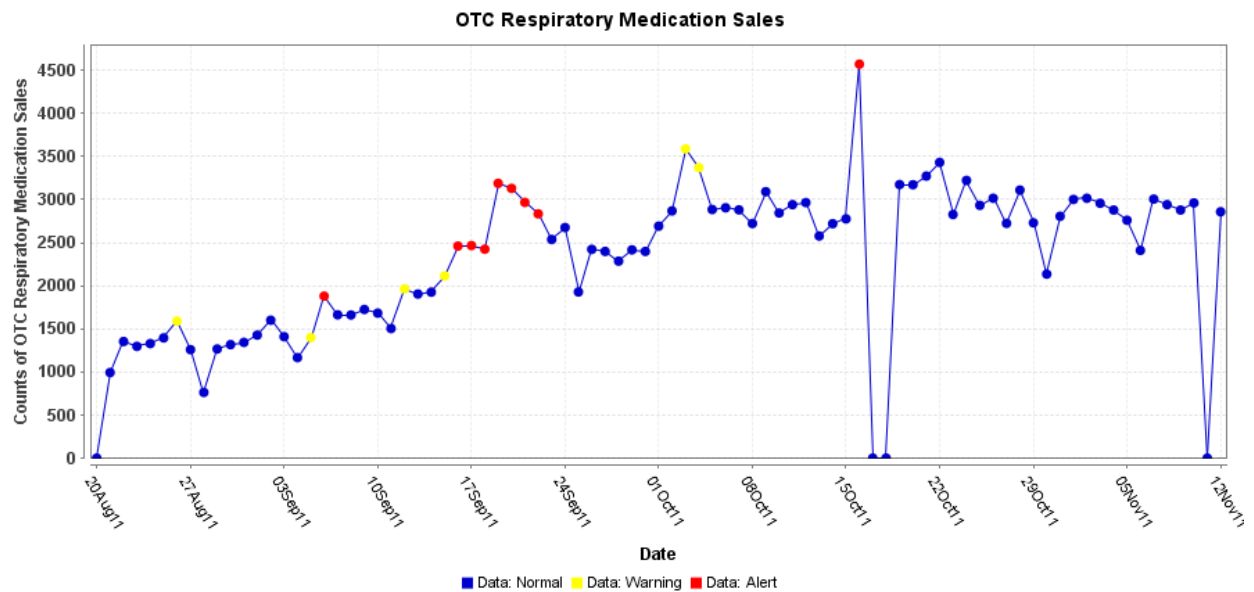
\* Includes 2010 and 2011 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



\*Includes 2011 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

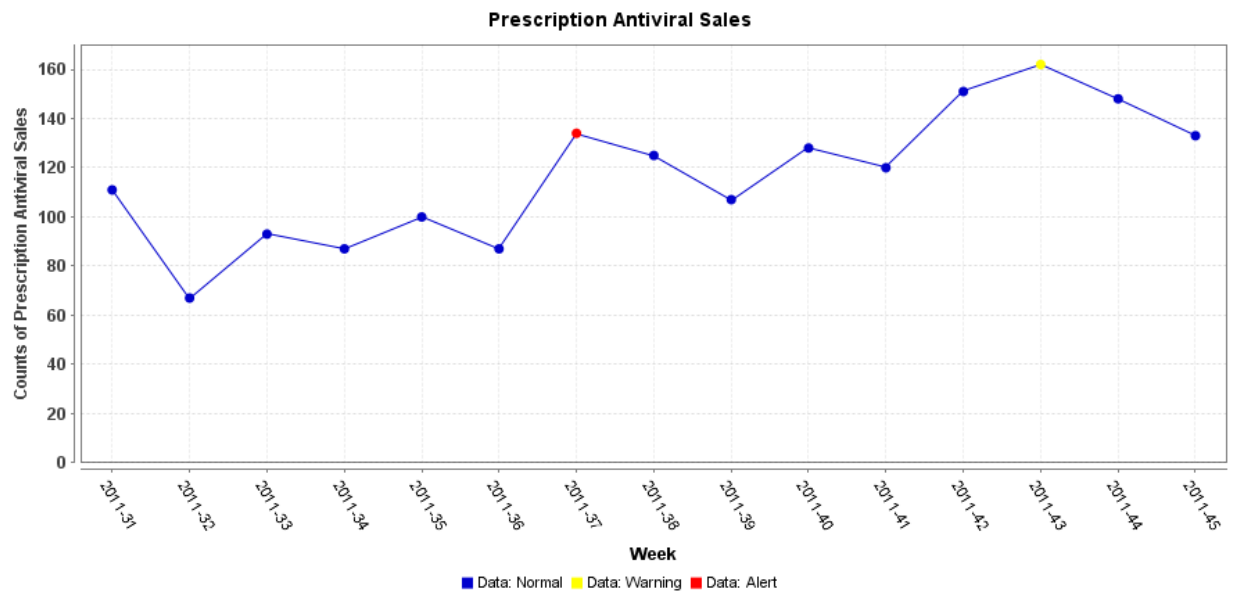
### OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



### PRESCRIPTION ANTIVIRAL SALES:

Graph shows the weekly number of prescription antiviral sales in Maryland.



## **PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS**

**WHO update:** The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of November 2, 2011, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 569, of which 334 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

## **NATIONAL DISEASE REPORTS**

**SALMONELLOSIS, SEROTYPE HEIDELBERG (USA):** 11 November 2011, CDC is collaborating with public health and agriculture officials in New York, New Jersey, other states, the Department of Agriculture's Food Safety and Inspection Service (USDA-FSIS), and the Food and Drug Administration to investigate a multistate outbreak of Salmonella [enterica serotype] Heidelberg infections linked to a kosher chicken liver product labeled as "kosher broiled chicken livers," which is not ready-to-eat and requires further cooking before eating. Public health investigators are using DNA "fingerprints" of Salmonella bacteria obtained through diagnostic testing with pulsed-field gel electrophoresis (PFGE) to identify cases of illness that may be part of this outbreak. They are using data from PulseNet, the national subtyping network made up of state and local public health laboratories and federal food regulatory laboratories that performs molecular surveillance of foodborne infections. Because the S. Heidelberg PFGE pattern associated with this outbreak commonly occurs in the USA, some of the cases with this pattern may not be related to this outbreak. Based on the previous 5 years of reports to PulseNet, approximately 30-40 cases with the outbreak strain would be expected to be reported per month in the USA. The outbreak strain is different from another strain of S. Heidelberg associated with ground turkey recalled earlier in 2011. In August 2011, CDC identified a sustained increase in the number of S. Heidelberg isolates with the outbreak strain reported to PulseNet from New York and New Jersey. From 1 Apr to 4 Nov 2011, a total of 157 illnesses were reported in New York (93 cases) and New Jersey (64 cases). Based on the previous 5 years of reports to PulseNet, New York and New Jersey would expect approximately 5 cases per month, but in June through August 2011, these states experienced approximately 30-40 cases a month. No significant increase in the number of illnesses above baseline was identified in other areas in the USA during this period. Among persons for whom information is available in New York and New Jersey, illnesses began on or after 13 Mar 2011. Ill persons range in age from less than 1 to 97 years with a median age of 10 years. 52 percent are female. Among the 125 ill persons with available information, 21 (17 percent) have been hospitalized. No deaths have been reported. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

**E. COLI VTEC (MISSOURI):** 11 November 2011, Officials with the St. Louis County Health Department say they learned on Wed 9 Nov 2011 that 4 students contracted E. coli in the Northwest School District in Jefferson County in October 2011. One of the students became so sick, he was placed on dialysis. Teachers and staff at the school were notified, but no one knows how it happened. Overall, since the outbreak was announced, 31 cases in the St. Louis region have been confirmed, and 2 more cases are suspected. 6 of those cases are in Jefferson County, but are not necessarily linked to the St. Louis County outbreak. The source of each outbreak is still a mystery. 2/3s of those infected say they ate at Schnucks' salad bars, but Schnucks has not been identified as a source of the outbreak. Health officials do say that they are not seeing many new suspected cases to investigate, which could indicate that the source of the bacterium has gone. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

**E. COLI VTEC (NORTH CAROLINA):** 10 November 2011, As a Charlotte-area boy who contracted E. coli at the state fair prepares to leave the hospital, health officials say they've identified the source of the outbreak that sickened 27 people. State officials say the outbreak spread from the Kelley Building, one of the fair's permanent structures where sheep, goats and pigs were housed and judged. No other exhibits, foods or activities were linked to the E. coli infections. State Epidemiologist Megan Davies said the illness is likely related to animal contact, though the study did not implicate any specific animal or breed in the outbreak. "We know that E. coli O157 is often found in the intestines of ruminant animals, which include cows, goats and sheep," Davies said. "These bacteria are shed in the animal's feces, so if it is on the animal itself or surfaces around the animal that someone touches, the bacteria can be transmitted to that person." Officials with the North Carolina Division of Public Health and the NC Department of Agriculture and Consumer Services said they are working to identify additional protective measures for fairgoers in the future. Investigators from the Division of Public Health conducted interviews in person and over the phone to find out what animal exhibits, foods or attractions the victims came in contact with. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

**SHIGELLOSIS (GEORGIA):** 07 November 2011, Just days after Worth County schools reopened after being shut down for 2 days because of a shigellosis outbreak, Southwest Georgia Public Health officials told us the illness has spread to at least 6 Southwest Georgia counties. They include Worth, Dougherty, Lee, Early, Seminole, and Decatur County. "It doesn't take a lot of the bacteria to cause infection, so this one is a more difficult one to eradicate quickly," said district health director Dr Jacqueline Grant. To prevent the spread of Shigella, doctors recommend that you wash your hands for 20 seconds with soap and warm water. Make sure to get in between the web of your fingers and when you're done, dry your hands completely. (Food Safety Threats are listed in

Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

**HANTAVIRUS (WYOMING):** 06 November 2011, A Carbon County [Wyoming] man is dead after contracting the hantavirus last month [October 2011]. On Thursday [3 Oct 2011], his name had not been released, but officials at the Wyoming Department of Health said he was treated at the hospital in Laramie. Only 9 cases of hantavirus [infections] have been reported in Wyoming since 2000. Symptoms of the illness include severe muscle aches and fatigue followed by difficulty breathing, headaches, dizziness, chills, vomiting and diarrhea. (Hantavirus is listed in Category C on the CDC List of Critical Biological Agents) \*Non-suspect case

## **INTERNATIONAL DISEASE REPORTS**

**BOTULISM (SCOTLAND):** 12 November 2011, Health officials in Scotland are urging the public to be aware of the symptoms of botulism after 2 members of the same family were hospitalized with an illness which is now thought likely to be the intoxication. Health Protection Scotland (HPS) said the pair remained in a stable condition. HPS has notified clinicians and has so far received no reports of any further suspected cases. Investigations are continuing into the possible cause, but botulism is often food-borne. Botulism is caused by toxins produced by the bacterium *Clostridium botulinum*, which attacks the nervous system and can affect people of any age. The infection is not contagious and cannot be spread from person to person. Symptoms of food-borne botulism typically begin between 12 and 36 hours after ingestion of contaminated food, but may become apparent in as little as 6 hours. Dr. John Cowden, consultant epidemiologist at HPS, said: "Botulism is rare in the UK. Symptoms are a combination of blurred vision, difficulty swallowing and difficulty speaking -- which rapidly get worse, followed by general muscle weakness. Any person, child or adult, with these symptoms should seek urgent medical advice. Antitoxins have proved very effective in treating the condition." (Botulism is listed in Category A on the CDC List of Critical Biological Agents) \*Non-suspect case

**HANTAVIRUS (ARGENTINA):** 11 November 2011, A 20-year-old youth, resident of the Barrio Santa Lucia neighborhood in Las Toscas city, contracted the virus [infection] in the neighboring Tacuarendi locale by handling rodents. This news agency contacted the Director of the local hospital, Dr. Roberto Saucedo, in order to obtain more information about this case. In the interview, that professional said that the case of the young Las Toscas man was positive and added that he is in critical condition because the virus [infection] caused among other effects, pulmonary and renal problems. Currently, the patient is interned in Reconquista [medical facility] and is undergoing dialysis. Following the initial tests, the physicians are going to carry out a 2nd test in order to confirm the infection, [although] Dr. Saucedo said that the symptoms are interpreted with total assurance as a hantavirus [infection] case. According to what was said in the interview, preventive work will be undertaken in local schools by Health and Social Development Area of the municipality. Also, he stated that this coming Monday [14 Nov 2011] a meeting will be held in the facilities of the hospital [including] health officials of the Reconquista Node, employees of Rural Hospital No. 4 and of Health and Social Development Area of the Toscas municipality. This news agency will continue providing related information so that the community will continue on alert and acquire the necessary resources to prevent hantavirus infections. (Hantavirus is listed in Category C on the CDC List of Critical Biological Agents) \*Non-suspect case

**HEPATITIS A (MEXICO):** 10 November 2011, Dr Ector Jaime Ramirez-Barba, secretary of health, issued an alert because of the increase in the number of persons infected with hepatitis A virus in the northeastern municipalities [of the state of Guanajuato]. The most affected area is San Miguel de Allende, where 393 cases have been reported during the past few months. According to information released by the government agency, the increase in hepatitis A virus infection is "because people are using non-potable water and they do not prepare their foods in suitable conditions." Another municipality where a moderate increase in the number of affected persons has been reported is Doctor Mora, with 22 registered cases. In comparison, the health secretary indicated that in San Miguel de Allende 37 persons were reported as infected with hepatitis A virus in 2010, that is 356 persons less than those counted so far in 2011. However, according to data cited by the health secretary, in the municipalities of San Luis de la Paz and Victoria there has been a reduction in the number of persons infected with hepatitis A virus compared to figures from 2010. Dr. Ramirez-Barba stated that hepatitis A is an acute infectious disease caused by a virus that leads to liver inflammation and malfunction. This virus may be present in feces and it enters the body when contaminated hands, food, water, or any other object comes into contact with the mouth. In order to prevent further transmission of this infection, healthcare officers recommend people to wash their hands with soap and water after going to the toilet, as well as after changing diapers and before preparing and eating food. Also, diapers must be changed on surfaces that can be cleaned and disinfected after every use. Toilets must be kept clean, maintaining an adequate supply of soap and clean towels. Only previously boiled or purified water must be used for drinking, and preparing food under poor hygiene conditions must be avoided. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

**JAPANESE ENCEPHALITIS AND OTHER (INDIA):** 09 November 2011, Five more children died of deadly disease of Japanese encephalitis (JE) at BRD Medical colleges, Gorakhpur taking the toll to 551 in eastern parts of Uttar Pradesh during this year [2011]. The children who died during the last 24 hours included 2 from Deoria district and one each from Maharajaganj, Gorakhpur, and neighbouring state of Bihar, the medical college sources said. A total of 3395 patients had been admitted to BRD Medical college since 1 Jan 2011, out of which 551 died this year. During the last 24 hours, 18 new patients were admitted while presently 205 patients are under treatment at medical college and other hospitals of eastern UP. The patients admitted to Gorakhpur medical college included 7 from neighbouring country of Nepal and 369 of Bihar. The patients who have so far died of encephalitis included 67 from Bihar and 2 from Nepal. (Viral Encephalitis is listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

**ANTHRAX, HUMAN, BOVINE (UGANDA):** 08 November 2011, Two people have already been reported dead in Sheema District, and the region has now moved a quarantine on all animals. The Ankole cattle corridor is on high alert following an anthrax outbreak that claimed the lives of two people in Sheema District, last week. The district health inspector, Mr. Francis Mugume, said



five other people were admitted to Kabwohe Health Centre IV in critical condition. Mr. Mugume identified the dead as males aged 56 years and 67 years, all butchers in Mashojwa Village, Kagango Sub-county. Previous reports indicated that a third butcher might be among the sick. Sheema District Health Officer Johnson Kabwishwa told Daily Monitor that a partial quarantine has been imposed on the sub-counties of Muzira, Kibingo, Kagango, and Kabwohe Itendero Town Council to stem the spread of the disease. "As a control measure, beef and its products have been banned in the affected sub-counties and farmers have started immunizing their animals. We advise that dead animals should be buried immediately," Mr. Kyabwisho said. Mbarara District veterinary officer Lewis Barigye said they are investigating the cause of the death of a cow in Kyantamba Mixed Farm in Kashaari. He said drugs for vaccination are readily available on the open market in pharmacies and farmers should be able to vaccinate their animals with the guidance of sub-county veterinary staff. The district leadership held a meeting yesterday and slammed quarantine on all movements of animals in the district. Bushenyi veterinary officer Rusoke Tibakyenga said ring vaccination will be carried out at the border with Sheema. "We have put up a roadblock at Rwentuuha Township and will start immunisation today (7 Nov 2011) along the border of Bushenyi with Sheema District. We have placed announcements on radios and there are talk shows to educate the public about the dangers of the disease," Dr Rusoke said. In Isingiro District, the district veterinary officer, Dr. Bruhan Kasozi, said the area was safe while Kiruhura's Francis Mugisha said the district is already under quarantine. (Anthrax is listed in Category A on the CDC List of Critical Biological Agents) \*Non-suspect case

## **OTHER RESOURCES AND ARTICLES OF INTEREST**

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmm.maryland.gov/>

Maryland's Resident Influenza Tracking System: <http://dhmm.maryland.gov/flusurvey>

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**NOTE:** This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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